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NEW RECORDS OF VASCULAR PLANTS ON THE LASAL MOUNTAINS, UTAH

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The LaSal Mountains are an isolated mountain range in southeastern Utah ranging in elevation from 1690 m to 3914 m. This wide range in elevation and the accompanying variety of slopes and microhabitats result in an extremely diverse flora. The most recent description of the LaSal Mountain flora was made by M. A. Franklin (unpublished data, Brigham Young University, Provo, Utah) in the early 1980s. This list consisted of historic and recent collections of plants; at the present it represents the most complete floral listing of this area.

One aspect of a recent study on the LaSal Mountain black bear population (Frost 1990, Richardson 1991) was a description of their habitat requirements. This required, among other things, making a collection of plant specimens from a wide variety of communities. Much of the collecting occurred in remote areas with difficult accessibility. As a result, I collected 14 species of vascular plants not recorded by Franklin. Seven of these species are new county records, six from Grand County (*Lithospermum multiflorum*, *Silene scouleri*, *Chimaphila umbellata*, *Sorbus scopulina*, *Ribes hudsonianum*, *Osmorhiza occidentalis*), and one from San Juan County (*Chenopodium atrovirens*). Plant nomenclature follows Welsh et al. (1987).

Apocynaceae

Apocynum androsaemifolium L. var. *androsaemifolium*, Grand Co., UT, T26S, R25E, Sec. 5 NE 1/4, 2560 m, aspen community, 1 August 1989, S. Richardson 354 (BRY).

This was the only location on the mountain that I observed this species. Its presence in an aspen community was somewhat unusual because it generally is found in oak and maple habitats (Arnow et al. 1980).

Boraginaceae

Lithospermum multiflorum Torr., Grand Co., UT, T26S, R26E, Sec. 6 SW 1/4, 2439 m, ponderosa pine and Gambel oak community, 10 September 1988, S. Richardson 215 (BRY).

This is the first published record of this species in Grand County. It was found only in ponderosa pine communities on the extreme eastern portion of the mountain. Pretty stoneseed is easily identified by the presence of purple dye in the roots.

Caprifoliaceae

Lonicera utahensis Wats., Grand Co., UT, T26S, R24E, Sec. 1 NW 1/4, 2744 m, aspen and white fir community, 17 August 1988, S. Richardson 165B (BRY).

Grand Co., UT, T26S, R25E, Sec. 17 NW 1/4, 3049 m, aspen and conifer community, 2 June 1989, S. Richardson 285 (BRY).

I frequently found this species on the north end of the mountain at sites with high elevations and north-facing slopes. Its occupation of sites not easily accessible explains, perhaps, why it had not been collected earlier.

Sambucus caerulea Raf., Grand Co., UT, T26S, R24E, Sec. 31 NE 1/4, 2378 m, mountain brush community, 18 July 1988, S. Richardson 20 (BRY).

Blue elderberry is rare on the LaSal Mountains and, as far as I know, exists only at this location. Two large plants, approximately 3 m in height, are the extent of its known distribution on this mountain.

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CARYOPHYLLACEAE

Silene scouleri Hook., Grand Co., UT, T26S, R24E, Sec. 16 NE 1/4, 2805 m, aspen and conifer community, 30 June 1989, S. Richardson 336 (BRY).

San Juan Co., UT, T28S, R24E, Sec. 1 NW 1/4, 2744 m, Gambel oak and snowberry community, 4 August 1988, S. Richardson 103 (BRY).

Few specimens of this species have been collected in Utah (Welsh et al. 1987). The specimen (336) from Grand County represents a county record. It was not uncommon to find this species on the mountain. Both specimens were collected at elevations higher than what this species normally occupies (Welsh et al. 1987).

CHENOPODIACEAE

Chenopodium atrovirens Rydb., San Juan Co., UT, T28S, R25E, Sec. 18 SW 1/4, 2652 m, Gambel oak community, 29 June 1989, S. Richardson 328 (BRY).

Grand Co., UT, T26S, R24E, Sec. 28 SW 1/4, 2744 m, aspen and Gambel oak community, 4 August 1989, S. Richardson 363 (BRY).

Both specimens were collected on xeric sites in association with oak. Specimen 328 is the first of this species collected in San Juan County. These specimens lacked hastately lobed leaves and occupied higher elevation sites, distinguishing it from *C. fremontii*.

COMPOSITAE

Artemisia biennis Willd., Grand Co., UT, T26S, R24E, Sec. 29 SW 1/4, 2500 m, mountain brush community near a canal, 1 October 1988, S. Richardson 220 (BRY).

Grand Co., UT, T26S, R24E, Sec. 17 NW 1/4, 2561 m, aspen community near spring, 9 September 1989, S. Richardson 376 (BRY).

I found this species only on the north end of the mountain. Both specimens were found near water on disturbed sites, specimen 220 on a mudslide and specimen 376 in an area disturbed by livestock.

Chrysothamnus viscidiflorus (Hook.) Nutt. var. *viscidiflorus*, Grand Co., UT, T25S, R25E, Sec. 19 NE 1/4, 2439 m, Gambel oak community, 30 August 1989, S. Richardson 375 (BRY).

While *C. viscidiflorus* was common on the mountain, the variety *C. v.* var. *viscidiflorus* was found only at this location. The large leaves and glabrous stems and leaves separated it from the other varieties.

PYROLACEAE

Chimaphila umbellata (L.) Barton, Grand Co., UT, T26S, R24E, Sec. 17 SE 1/4, 2927 m, aspen and conifer community, 4 September 1988, S. Richardson 207 (BRY).

Grand Co., UT, T26S, R24E, Sec. 16 SW 1/4, 3049 m, conifer community, 30 June 1989, S. Richardson 338 (BRY).

This was a common species at high elevations on steep, north-facing slopes. These specimens represent the first pipsissewa collected in Grand County.

ROSACEAE

Geum alleppicum Jacq., Grand Co., UT, T26S, R25E, Sec. 4 NE 1/4, 2500 m, mountain brush community, 24 July 1989, S. Richardson 66, 67, 76, 77 (BRY).

Grand Co., UT, T26S, R25E, Sec. 17 NW 1/4, 2988 m, meadow in aspen community, 29 July 1988, S. Richardson 82 (BRY).

Few specimens of this species have been collected in Utah (Kaye Thorne, Brigham Young University Herbarium, personal communication), and these five specimens represent nearly half of the Utah material at the BYU Herbarium. This species was found only on the northeast portion of the mountain.

Sorbus scopulina Greene, Grand Co., UT, T26S, R24E, Sec. 1 NW 1/4, 2744 m, aspen and white fir community, 17 August 1988, S. Richardson 165C (BRY).

This is a rare species on the LaSal Mountains and was found only at two locations, both high-elevation, mesic sites on north-facing slopes. This specimen is the first recorded collection in Grand County.

SAXIFRAGACEAE

Ribes hudsonianum Richards., Grand Co., UT, T26S, R24E, Sec. 29 SW 1/4, 2500 m, mountain brush community, 1 October 1988, S. Richardson 227 (BRY).

This species was seen only once and is a new record for Grand County. Its location in a mountain brush community is somewhat unusual as its typical habitat is aspen or conifer (Welsh et al. 1987). The unarmed branches and large, strongly 3-lobed leaves helped distinguish this species.

UMBELLIFERAE

Osmorhiza occidentalis (Nutt.) Torr., Grand Co., UT, T26S, R24E, Sec. 7 SE 1/4, 2348 m, mountain

brush community, 13 August 1988, S. Richardson 154 (BRY).

Grand Co., UT, T26S, R24E, Sec. 21 NW 1/4, 2988 m, aspen community, 3 June 1989, S. Richardson 289 (BRY).

Found only on the northwest corner of the mountain on mesic sites, this species is a new record for Grand County.

LILIACEAE

Allium bicептrum Wats., San Juan Co., UT, T27S, R25E, Sec. 6 SW 1/4, 3049 m, open meadow in aspen community, 5 August 1988, S. Richardson 129 (BRY).

This species is uncommon in San Juan County and is found mainly in the western half of the state (Welsh et al. 1987). This is one of the few alliums to occupy high elevations (Welsh et al. 1987).

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